

ABSTRACT OF THE DISCLOSURE

A connector to an optical fiber comprises a prism, a ferrule and an aspheric lens. The prism includes a triangular wedge element having a first surface, a second surface and a base. The ferrule guides the optical fiber so as to contact the optical fiber with the first surface of the 5 prism. The aspheric lens is integrated on the second surface, the integrated aspheric lens being positioned so that the prism serves to redirect a light beam at an angle relative to an axis of the optical source input through total internal reflection by utilizing the base of the triangle wedge element. The aspheric lens serves to collimate the redirected light beam or focus the light beam before being redirected. This arrangement may, for example, be used within a WDM system to 10¹¹ multiplex and de-multiplex several wavelengths of light, using a "zig-zag" optical path configuration and thin film filters to separate the wavelengths.

11
12
13
14
15
16
17
18
19
20
21
22
23
24